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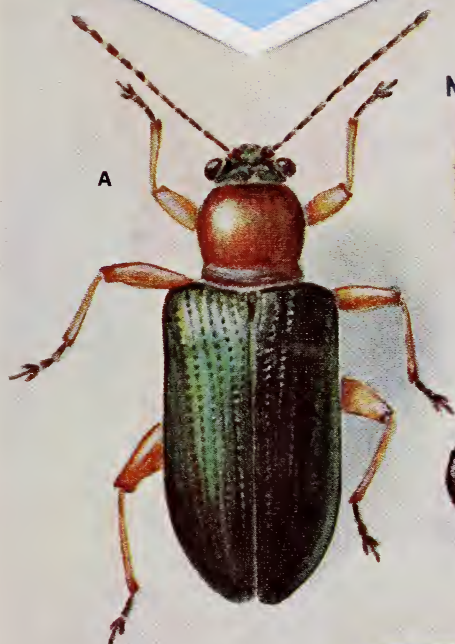
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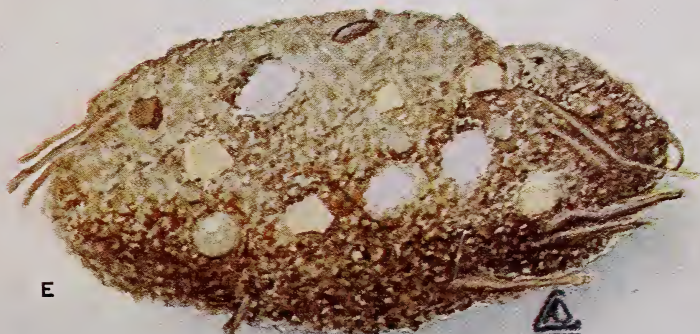
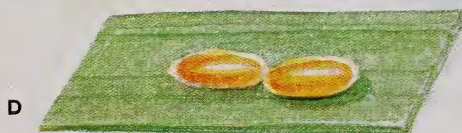
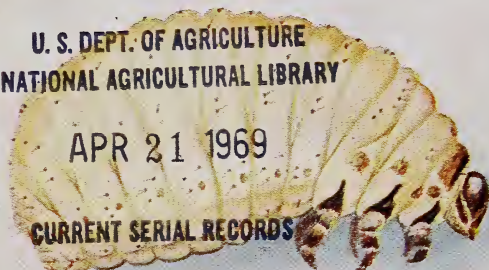
# watch for the Cereal Leaf Beetle



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# Watch for the **CEREAL LEAF BEETLE**

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The cereal leaf beetle <sup>1</sup> is a serious pest of grain crops. It occurs throughout most of Europe, extending into Siberia in the U.S.S.R. It also damages grain in Morocco and Tunisia in North Africa, and Iran and Turkey in the Near East.

This pest was first identified in the United States in July 1962 in Berrien County, Mich. Since then, it has been found in other parts of Michigan, throughout Ohio and most of Indiana, and in limited areas of Illinois, Kentucky, Pennsylvania, and West Virginia.

## **DAMAGE**

Both adults and larvae of the cereal leaf beetle damage grain crops. They take their nourishment from grain shoots, or from grasses by chewing out long strips between the leaf veins. In a heavy infestation, this damage causes the plants to appear yellowish white.

In other parts of the world, the damage caused by this pest has also been of considerable economic importance. In parts of the U.S.S.R., for example, crop losses have ranged from 25 to 50 percent. In certain

areas of Rumania, attacks have been so severe that the crop had to be plowed under.

Overwintered adults of the cereal leaf beetle appear in the spring; they mate, and the female beetles lay eggs on the upper surfaces of host plant leaves. Larvae hatch from the eggs and begin feeding on the young, tender leaves of the host plants—oats, wheat, barley, rye, corn, and native grasses. In southern Michigan, in 1963, overwintering adults became active in late March. Eggs were produced in late April and early May, and the first adults emerged about the middle of June.

The adults feed until fall, then hibernate behind corn sheaths, under field trash, or in crevices until the following spring.

## **DESCRIPTION**

The adult cereal leaf beetle is about 3/16 inch long; the male is slightly smaller and narrower than the female. Wing covers and head are a metallic, bluish black. The legs and the front segment of the thorax are reddish.

The eggs are cylindrical, rounded, and less than 1/16 inch long. Newly

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<sup>1</sup> *Oulema melanopus*.

*Cover illustration:* A. Adult beetle. B. Lateral view of larva with fecal coating removed. C. Dorsal view of larva in protective globule of fecal material. D. Eggs (laid singly or in pairs on top of leaves). E. Pupal case (usually in the upper one inch of soil).



## CEREAL LEAF BEETLE

A. Larvae feeding on young oat plants.

B. Adult damage to corn blade.

C. Life stages: a, adult; b, eggs;  
c, larva (in fecal covering);  
d, pupal case.



laid eggs are yellowish, but the color darkens to almost black before they hatch.

The larva is slightly longer than the adult, and resembles the Colorado potato beetle larva in shape. The head and legs are brown black; the body is yellowish. The larva usually is covered by a globule of fecal matter that obscures its coloration except for the head and legs.

The pupa, when removed from its earthen cell, is enveloped in a thin, transparent membrane. Its coloration varies from a bright yellow when it is first formed, to the coloration of the adult just before emergence.

In North America, several species of leaf beetles closely resemble the cereal leaf beetle; the asparagus beetle is one example of a similar species. However, the cereal leaf beetle differs from these other species in that it feeds only on cereals and related grasses. Also, the combination of color patterns of the adult cereal leaf beetle, described here, is not present in the other similar species.

## QUARANTINE

In an effort to prevent this pest from being spread by shipments of infested materials, Federal and State quarantines have been established. Under the regulations, materials and equipment that may be infested must be treated before they are moved from an infested area; these

include hay, straw, fodder, litter, small grains, corn, sod, and harvesting machinery, and any other articles found to be infested. Some of these materials require treatment only during certain periods of the year. Persons planning to move such materials from an infested area should first get in touch with local, State, or Federal agricultural officials.

## CONTROL

Federal and State agencies are cooperating in an effort to control the cereal leaf beetle.

If you find the cereal leaf beetle on your premises, report it at once to your county agricultural agent or local plant pest control official, and ask for information on what you can do to control the pest.

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If you find insect forms that look like those on the color pages in this publication, place them in a small bottle of rubbing alcohol and send them to the nearest plant pest control official, county agent, or to:

Plant Pest Control Division  
Agricultural Research Service  
Federal Center Building  
Hyattsville, Md. 20782

When sending specimens, include your name, address, and complete information as to date and place of collection. *Do not send live insects through the mail.*

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PREPARED BY PLANT PEST CONTROL DIVISION  
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